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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,157	03/23/2004	Richard L. Sandstrom	2003-0022-01	4818
21773	7590	07/27/2007		
CYMER INC LEGAL DEPARTMENT 17075 Thornmint Court SAN DIEGO, CA 92127-2413			EXAMINER NGUYEN, PHILLIP	
			ART UNIT 2828	PAPER NUMBER
			MAIL DATE 07/27/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/808,157

Applicant(s)

SANDSTROM ET AL.

Examiner

Phillip Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7, 9-11, 13-45, 47-49, 51-53, 55-87, 89-91, 93-95 and 97-127 is/are pending in the application.
- 4a) Of the above claim(s) 13-28, 35-42, 55-70, 77-84, 97-112 and 119-126 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-34, 71-76 and 127 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 43-45 and 85-87 is/are rejected.
- 7) ☒ Claim(s) 5-7, 9-11, 47, 49, 51-53, 89-91 and 93-95 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Acknowledgement***

1. Claims 4, 8, 12, 46, 50, 88, 92 and 96 are cancelled; claims 2, 44 and 86 are amended.

### ***Drawings***

2. The drawings were received on 7/5/2007. These drawings are Fig. 1-18.

### ***Response to Arguments***

3. Applicant's arguments filed 7/5/2007 have been fully considered but they are not persuasive.

Applicant argues that Lloyd neither discloses or suggests a high power narrow band, high repetition rate laser light source system line narrowing unit, not does discloses or suggest a fast moving angularly positionable tuning mirror. Applicant further alleges that "fast moving angularly positionable tuning mirror" is an element of the claim, and not a part of preamble.

It's clear that Lloyd and Calvet disclose mirror structures that include all of limitations as claimed even though they do not use the same term as "a fast moving angularly positionable tuning mirror". The claims fail to define how fast the mirror moves and how it is tuned. It's

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Examiner's position to interpret that the mirror is moveable or positionable. Therefore the moveable or positionable mirror structures taught by Lloyd and Calvet meet all the requirements of the claims.

Since claims 4, 8, 12, 46, 50, 88, 92 and 96 are cancelled, the double patenting rejections are withdrawn herein.

Since claims 2, 44 and 86 are amended, the USC 112, second paragraph, rejections are also withdrawn herein.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 43 and 85 rejected under 35 U.S.C. 102(b) as being anticipated by Lloyd (5801891). Lloyd discloses in Fig. 1-4 an apparatus comprising a mirror mounting frame 12 comprising a first material and a relatively flat mounting surface area; a reflective optic 10 comprising a second material having a coefficient of thermal expansion different from that of the first material of the mounting frame (col. 2, lines 49-52); at least two attachment points of attachment between the mounting frame and the reflective optic on the mounting surface; and at

least one flexure mount 14/16/18 formed in the mounting frame that is flexible in a flexure axis corresponding to a longitudinal axis of thermal expansion of the mounting frame and the reflective optic, positioned at one of the at least two points of attachment. It is noted that the flexure axis is the axis parallel to the long side of the rectangular frame and mirror. Two points of attachment are the mounting positions of the flexures to the frame, for example, the mounting pad 32 from Fig. 3. It's further noted that the preamble is not considered patentable weight when the claim body fails to provide the limitation from the preamble.

5. Claims 1-2, 43-45 and 85-87 are rejected under 35 U.S.C. 102(e) as being anticipated by Calvet et al. (US 6661962).

With respect to claims 1, 43 and 85, Calvet discloses in Fig. 3 an apparatus comprising a mirror mounting frame 302 comprising a comprising a first material and a relatively flat mounting surface area 334; a reflective optic 306 comprising a second material having a coefficient of thermal expansion different from that of the first material of the mounting frame (col. 1, lines 61-65 and col. 3, lines 24-27); at least two attachment points of attachment between the mounting frame and the reflective optic on the mounting surface; and at least one flexure mount 310A-B, 314A-B, and 308 formed in the mounting frame that is flexible in a flexure axis corresponding to a longitudinal axis of thermal expansion of the mounting frame and the reflective optic, positioned at one of the at least two points of attachment. It is noted that the flexure axis is the axis parallel to the longest side of the mounting frame 302. In this case the longitudinal direction is the direction from the top to bottom from the Fig. 3. A mounting surface 334 may include a lot of points which is considered having at least two points of

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attachment. It's further noted that the preamble is not considered patentable weight when the claim body fails to provide the limitation from the preamble.

With respect to claims 2, 44 and 86, Calvet further discloses the flexure mount comprising a flexure body 308 formed from the material of the mirror mounting frame 302; at least one flexure arm 310A/B formed from the material of the mirror mounting frame and attached at one end to the mirror mounting frame and at the other end of the flexure body 308; and a plurality of slots 312A-B in the mirror mounting frame configured to allow relative movement between the flexure body 308 and the mirror mounting frame.

With respect to claims 3, 45 and 87, Calvet discloses at least one flexure arm 310 comprises a first and second flexure arm 310A and 310B oppositely positioned on either side of the flexure body generally orthogonal to the flexure axis.

***Allowable Subject Matter***

6. Claims 5-7, 9-11, 47, 49, 51-53, 89-91, 93-95 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 29-34, 71-76 and 127 are allowed.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

***Communication Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Nguyen whose telephone number is 571-272-1947. The examiner can normally be reached on 9:00 AM - 6:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MINSUN HARVEY, can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Phillip Nguyen/

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MINSUN OH HARVEY  
PRIMARY EXAMINER